AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25 (Cancel).

26. (Previously Presented) An isolated nucleic acid comprising a nucleotide sequence encoding the amino acid sequence: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro- Gln or fragment of said amino acid sequence that possesses inhibitory activity against human leukocyte elastase.

27. (Previously Presented) The isolated nucleic acid according to claim 26 wherein said nucleotide sequence encodes said amino acid sequence.

28. (Previously Presented) The isolated nucleic acid according to claim 26 wherein said nucleic acid comprises the nucleotide sequence:

GCTCAAGAACCAGTTAAAGGTCCTGTGTCTACT
AAGCCAGGTTCTTGTCCTATTATCTTGATTCGTTGCGCTATGTTAAACCCACCTAACCGT
TGTTTGAAGGACACTGATTGTCCAGGTATCAAAAAGTGCTGTGAAGGTTCCTGCGGTATG
GCTTGTTTCGTTCCACAA or fragment thereof that encodes a polypeptide that possesses inhibitory activity against human leukocyte elastase.

29. (Previously Presented) A replicable expression vehicle comprising a nucleic acid comprising a nucleotide sequence encoding the amino acid sequence: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro- Gln or fragment of said amino acid sequence that possesses inhibitory activity against human leukocyte elastase, and a vector.

30. (Previously Presented) A transformed host cell comprising said replicable expression vehicle according to claim 29.

31. (Previously Presented) A method of producing the replicable expression vehicle according to claim 29 comprising introducing said nucleic acid into said vector at an insertion site so that a replicable expression vehicle is obtained that directs synthesis of said amino acid sequence, or fragment thereof, encoded by said nucleotide sequence.

32. (Previously Presented) A method of producing a polypeptide comprising culturing said host cell according to claim 30 under conditions such that said amino acid sequence, or fragment thereof, is produced.

33. (Previously Presented) A method of producing a transformed host cell comprising introducing said replicable expression vehicle according to claim 29 into a host cell.

34. (Previously Presented) An isolated nucleic acid comprising a sequence complementary to a nucleotide sequence encoding the amino acid sequence: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro- Gln or fragment of said amino acid sequence that possesses inhibitory activity against leukocyte elastase.

35. (Previously Presented) An isolated nucleic acid comprising a sequence complementary to the nucleotide sequence:

GCTCAAGAACCAGTTAAAGGTCCTGTGTCTACT

AAGCCAGGTTCTTGTCCTATTATCTTGATTCGTTGCGCTATGTTAAACCCACCTAACCGT

TGTTTGAAGGACACTGATTGTCCAGGTATCAAAAAGTGCTGTGAAGGTTCCTGCGGTATG

GCTTGTTTCGTTCCACAA or fragment thereof that encodes a polypeptide that possesses inhibitory activity against human leucocyte elastase.

36. (Previously Presented) An isolated nucleic acid comprising the nucleotide sequence

GCG CAA GAG CCA GTC AAA GGT CCA GTC TCC ACT AAG CCT GGC TCC TGC

CCC ATT ATC TTG ATC CGG TGC GCC ATG TTG AAT CCC CCT AAC CGC TGC TTG AAA GAT ACT GAC TGC CCA GGA ATZ AAG AAP TGC TGT GAA GGC TCT TGC GGG ATG GCC TGT TTC GTT CCC CAG

wherein Z = T, C or A and P = A or G, or sequence complementary thereto.

37. (New) An isolated nucleic acid consisting of a nucleotide sequence encoding the polypeptide: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro-Gln.

38. (New) The nucleic acid according to claim 37 wherein said nucleotide sequence is GCTCAAGAACCAGTTAAAGGTCCTGTGTCTACT AAGCCAGGTTCTTGTCCTATTATCTTGATTCGTTGCGCTATGTTAAACCCACCTAACCGT TGTTTGAAGGACACTGATTGTCCAGGTATCAAAAAGTGCTGTGAAGGTTCCTGCGGTATG GCTTGTTTCGTTCCACAA.

39. (New) An isolated replicable plasmid expression vehicle comprising as an insert the nucleic acid according to claim 37.

40. (New) An isolated transformed host cell comprising the expression vehicle according to claim 39.

41. (New) A process for the preparation of a replicable expression vehicle comprising inserting the nucleic acid according to claim 37 into a vector at an appropriate insertion site so that a replicable plasmid expression vehicle is obtained that directs the synthesis of the polypeptide encoded by said nucleic acid.

42. (New) A process for producing a polypeptide comprising culturing the host cell according to claim 40 under conditions sufficient to produce said polypeptide.

43. (New) A process for the preparation of a transformed host cell comprising introducing into a host cell the expression vehicle according to claim 39.